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JUL 13 2005

WATER PROTECTION PROGRAM

**East Yellow Creek
Recreational Use Attainability Analysis**

July 2005

Prepared for:
UAA Review Committee
Water Quality Monitoring & Assessment Section
Water Protection Program
MISSOURI DEPARTMENT OF NATURAL RESOURCES
1101 Jefferson
Jefferson City, MO 65102-0176

Prepared by:
MEC WATER RESOURCES, INC.
1000 North College Avenue, Suite 4
Columbia, Missouri 65201

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A – Water Body Identification

Water Body Name: East Yellow Creek (from USGS 7.5' quad)
8-digit HUC: 10280103
Missouri WBID # 0597
County: Linn, Chariton
Upstream Legal Description: NW ¼ of NW ¼ of Section 30, Township 57N, Range 18W
Downstream Legal Description: SW ¼ of SE ¼ of Section 17, Township 56N, Range 19W
Upstream Coordinates: 39.71978 latitude, -92.96975 longitude (USG 84, ddd,dddd)
Downstream Coordinates: 39.66021 latitude, -93.04710 longitude (USG 84, ddd,dddd)
Discharger Facility Name(s): Marceline WWTF
Discharger Permit Number(s): MO0039721
Number of Sites Evaluated: 4
Name of Surveyor and Telephone Number: David Carani/573-443-4100
Organization: MEC Water Resources
Position: Water Quality Specialist

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____

Date: _____

6/28/05

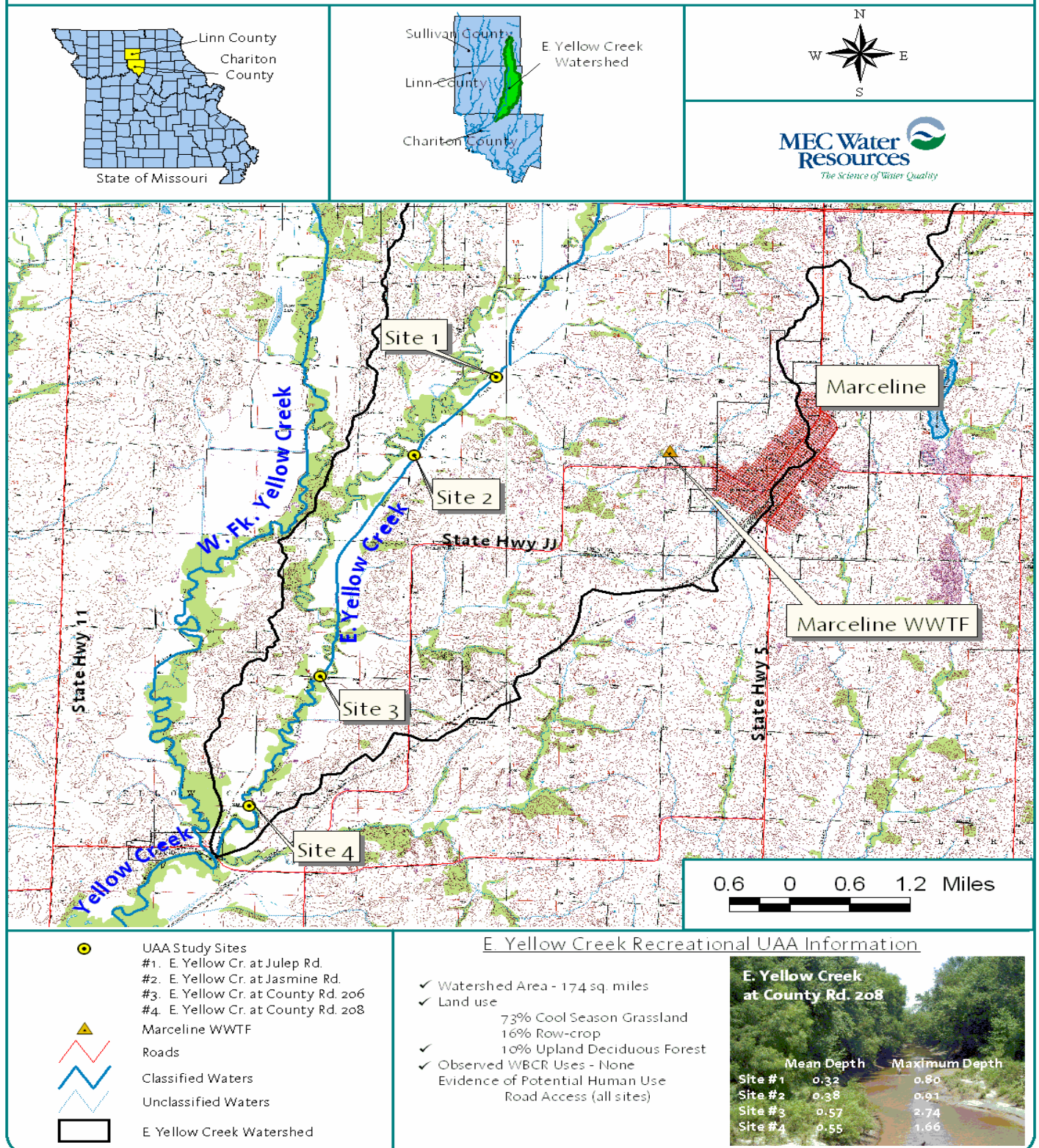
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WATER PROTECTION PROGRAM

MEC Water Resources, Inc.

East Yellow Creek

Recreational Use Attainability Analysis

Figure 1. E. Yellow Creek Study Area and Sites



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 0597		Site Location Description:	
Site GPS Coordinates: 39.73273/-93.00165		Site 1 Julep Road Bridge Crossing	
Date & Time: 6/28/05 7:00		Facility Name: Marceline WWTF	
Personnel: DC DW		Permit Number: MO 0039721	
Current Weather Conditions: Cloudy 80°F		Weather Conditions for Past 7 days: Hot, dry	
Photo Ids: Upstream: 4	Downstream: 5	Other: 1, 2, 3 (trash), 6 (left bank), 7 (rt. bank)	

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input type="checkbox"/> None of the above	<input checked="" type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Shotgun shells + broken clay pigeons (pics 1+2)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:	

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads Bridge Cross	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: trash				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:**Upstream View Physical Dimensions:**

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec):	<u>8.18</u>

Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec):	<u>SEE ABOVE</u>

Substrate*: (These values should add up to 100%.)

% Cobble	<u>5</u>	% Gravel	<u>95</u>	% Sand	% Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

<u>NONE</u>

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature] Date: 6/28/05

Organization: MEL Water Resources, Inc. Position: Field Technician

Figure 2. East Yellow Creek Site 1 Downstream View



Figure 3. East Yellow Creek Site 1 Upstream View



Mean depth along a 1200 ft. assessment reach was 0.32 ft as determined from 10 transects (Appendix B). The maximum depth observed at this location was .8 feet. MEC staff measured streamflow as 8.18 cfs at the bridge.

MEC staff did not observe any direct or indirect evidence of WBCR at Site 1. MEC staff did observe trash in the form of old tires and boxes that were likely dumped from the bridge (Figure 3). Additionally, spent shotgun shells and broken clay targets were observed on the stream bank.

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: <u>0597</u>		Site Location Description:	
Site GPS Coordinates: <u>39.71887/-93.01673</u>		<u>Site 2 JASMINE ROAD Bridge Crossing</u>	
Date & Time: <u>6/28/05</u> <u>845</u>		Facility Name: <u>Marceline WWTF</u>	
Personnel: <u>DC DW</u>		Permit Number: <u>MO 0039721</u>	
Current Weather Conditions: <u>cloudy 85°</u>		Weather Conditions for Past 7 days: <u>Hot</u>	
Photo Ids: Upstream: <u>8</u>	Downstream: <u>9</u>	Other: <u>10, 11</u>	

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:	

Evidence of Human Use*:

<input checked="" type="checkbox"/> Roads <u>Bridge Crossing</u>	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input checked="" type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				<u>Limb Line</u>

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Stream Morphology:

Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec):	<u>8.55</u>

Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec):	<u>SEE ABOVE</u>

Substrate*: (These values should add up to 100%.)

<u>5</u> % Cobble	<u>5</u> % Gravel	<u>90</u> % Sand	% Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

<u>NONE</u>

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature] Date: 6/28/05

Organization: MEL Water Resources, Inc. Position: Field Technician

Figure 5. East Yellow Creek Site 2 Downstream View



Site 3. Road 206 Bridge Crossing (39.68226, -93.03448) 6.43 Miles from WWTF

The riparian area is generally wider at Site 3 than that at Sites 1 or 2 and consists of larger trees, thick brush, and some grassy areas (Figure 6). The stream banks at Site 3 are somewhat steep and covered with rocks, brush, and downed trees (Figure 7). Stream substrate consisted of mostly sand with some mud and clay.

Mean depth along a 700 ft. assessment reach was 0.57 feet as determined from 11 transects (Appendix B). The maximum depth observed at this location was 2.74 feet in a pool downstream of the road access. Measured streamflow was 11.21 cfs.

Figure 6. East Yellow Creek Site 3 Downstream View



MEC Water Resources, Inc.

East Yellow Creek

Recreational Use Attainability Analysis

MEC staff believe that WBCR is neither an existing or an attainable use at this site based on limited access to the stream imposed by steep slopes, absence of observed WBCR uses, and low flow shallow conditions.

Site 2. Jasmine Road Bridge Crossing (39.71887, -93.01673) 3.61 Miles from WWTF

The stream banks near the road are steeply sloping and are covered with low-growing brush and rocks (Figure 4). Riparian areas are vegetated by the upland deciduous forest complex and row crop agriculture. The stream channel was observed to be mostly sand with some cobble and gravel (Figure 5).

Mean depth along a 900 ft. assessment reach was 0.38 ft. as determined from 11 transects (Appendix B). The maximum depth observed at this location was .91 ft. in a small pool downstream of the road access. Flow was measured as 8.55 cfs.

There were no direct human uses observed at this site. No individuals were seen or found to be available for interviews near the bridge crossing at the time of the survey. A fishing line hanging from the bridge was the only evidence of human use.

MEC staff concludes that WBCR is neither an existing or an attainable use at this site based on absence of observed recreational uses, low flow shallow conditions and difficult stream access imposed by steeply sloping banks.

Figure 4. East Yellow Creek Site 2 Right Bank



Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 0597		Site Location Description:	
Site GPS Coordinates: 39.68226/-93.03448		Site 3 Road 206 Bridge Crossing	
Date & Time: 6/28/05 1300		Facility Name: Marceline WWTF	
Personnel: DC DW		Permit Number: MO 0039721	
Current Weather Conditions: cloudy 90°		Weather Conditions for Past 7 days: Hot, dry	
Photo Ids: Upstream: 19	Downstream: 18	Other: 17 20	

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input checked="" type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:	

Evidence of Human Use*:

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input checked="" type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input type="checkbox"/> Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec):	<u>11.2</u>

Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec):	<u>SEE ABOVE</u>

Substrate*: (These values should add up to 100%.)

% Cobble	% Gravel	<u>45</u> % Sand	% Silt	<u>5</u> % Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

<u>None</u>

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature] Date: 6/28/05Organization: MEC Water Resources, Inc. Position: Field Technician

Figure 7. East Yellow Creek Site 3 Right Bank



MEC staff did not observe any WBCR uses at Site 3. All terrain vehicle tracks were observed on the stream bank near the upstream section of the assessment reach. In addition to the steep bank slopes, “No Trespassing” signs were posted on land adjacent to the stream and near the access point.

MEC staff concludes that WBCR is neither an existing nor an attainable use at this site based on the low flow shallow conditions and the lack of observed WBCR uses.

Site 4. Road 208 Bridge Crossing (39.66021, -93.04710) 8.88 Miles from WWTF

The stream banks near the crossing at Road 208 are steeply sloping and lightly vegetated (Figure 8). Riparian areas are vegetated by upland deciduous forest and row crop agriculture. The stream channel was observed to be mostly sand with some cobble and gravel. A large pool was present downstream from the bridge and was likely due to the logjam that stretched across the stream beneath the bridge (Figures 9 and 10).

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 0547		Site Location Description:	
Site GPS Coordinates: 39.66021/-93.04710		Site 4 Road 208 Bridge Crossing	
Date & Time: 6/28/05 1115		Facility Name:	
Personnel: DC DW		Permit Number:	
Current Weather Conditions: 85°		Weather Conditions for Past 7 days: Hot + Dry	
Photo Ids: Upstream: 12	Downstream: 13	Other: 14 15-banks 16-log jam	

Uses Observed*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input checked="" type="checkbox"/> Steep slopes	<input type="checkbox"/> Other:	

Evidence of Human Use*:

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: No Evidence of human use				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Stream Morphology:

Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec):	<u>8.95</u>

Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft ³ /sec):	<u>SEE ABOVE</u>

Substrate*: (These values should add up to 100%.)

% Cobble	<u>5</u> % Gravel	<u>95</u> % Sand	% Silt	% Mud/Clay	% Bedrock
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Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

<u>NONE</u>

Water Characteristics*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input checked="" type="checkbox"/> Clear	<input type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [Signature] Date: 6/28/05

Organization: MEC Water Resources, Inc. Position: Field Technician

Figure 10. East Yellow Creek Site 4 Logjam Under Bridge



Mean depth along a 960 ft. assessment reach was 0.55 ft. as determined from 11 transects (Appendix B). The maximum depth observed at this location was 1.66 feet. Measured streamflow was 11.21 cfs.

There were no direct human uses observed at this site. Additionally, there was no evidence of human use present at Site 4. No individuals were seen or found to be available for interviews near the bridge crossing at the time of the survey.

MEC staff concludes that WBCR is neither an existing nor an attainable use at this site based on the low flow shallow conditions, steep slopes, and the lack of observed WBCR uses.

V. WHOLE BODY CONTACT USE ATTAINABILITY RECOMMENDATION

MEC Staff concludes that the surveyed reaches of East Yellow Creek do not currently support WBCR uses due to the absence of observed WBCR uses or evidence of WBCR uses and the presence of steep bank slopes. Furthermore, WBCR uses in East Yellow Creek are not attainable according to depth criteria associated with ephemeral, intermittent, or low flow conditions set forth in MDNR UAA guidance.

VI. REFERENCES

- Blunt, M. 2004. Code of State Regulations; Missouri Water Quality Standards, Title 10, Division 20, Chapter 7.
- Missouri Department of Natural Resources. 2004. Recreational Use Attainability Analysis Protocol. Water Protection Program, Jefferson City, MO.

Figure 8. East Yellow Creek Site 4 Right Bank



Figure 9. East Yellow Creek Site 4 Downstream View

